

species are located near the tree of interest here. No albino seedlings were observed in the vicinity of these trees, though normal seedlings were present. The mutant tree is unusual in that it bears a large witches' broom in the upper crown. This abnormality is probably unrelated to the mutant condition, but may possibly be of importance in facilitating self-pollination.

In April, 1967, flowering buds were few and none were observed in the witches' broom. On cut branches brought indoors the main pollen shed occurred one or two days before the stigmas expanded, but some pollen continued to be shed during the period of receptivity of the stigmas.

The data available suggest that this elm tree was largely or entirely self-pollinated and was self-fertile.

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LITERATURE CITED

- JOHNSON, L. P. V. 1946. Fertilization in *Ulmus* with special reference to hybridization procedure. *Canad. Jour. Res. Sect. C, Bot. Sci.* 24: 1-3.
- BRITWUM, S. P. K. 1960. Artificial hybridization in the genus *Ulmus*. *Proc. 8th Northeastern Forest Tree Improvement Conference* 1960: 43-47.

NOTE ON CORYDALIS BULBOSA On 2 May, 1932, E. J. Palmer collected a *Corydalis* in the Arnold Arboretum on a "shaded bank, near the new [Bussey] greenhouse and State Laboratory, No. 40005". This was identified as *Corydalis bulbosa* (L). DC., and so listed in the "Supplement to the Spontaneous Flora of the Arnold Arboretum" *Jour. Arnold Arb.* 16:92 (1935). This population has persisted to the present. During the first week in May of the present year (1967) it made a considerable show under a tree of the flowering crab *Malus* 'Prince Georges' (AA No. 282-43-A). Collections of flowering and fruiting material were made (DeWolf Nos. 1883 and 1883a) and on checking the identification it was found that the population in fact repre-

sents the species which is currently called *Corydalis solida* (L.) Swartz in European treatments.

It is of interest that, although *Corydalis bulbosa* has persisted for at least 35 years in the same general location, it is still found mostly in the cleared soil under the various flowering crabapples on the bank. It does not seem to be able to spread in competition with the adjacent grasses. Neither has it been able to spread laterally along the hillside into the cleared soil under the shrubs of the *Forsythia* collection. This in spite of an apparently abundant set of fruit.

A note on the name *Corydalis bulbosa* is in order. In 1753 Linnaeus (Sp. Pl. 2:699, 700) recognized a *Fumaria bulbosa* with three varieties: α *cava*; β *intermedia*; γ *solida*. These three varieties have been generally treated, by subsequent authors, as distinct species. They have had a varied nomenclatural history, first in *Fumaria* and later in *Corydalis*. In *Flora Europa* (which may be taken as the consensus of European opinion) 1:253, 254 (1964) α *cava* is treated as *Corydalis bulbosa* (L.) DC., β *intermedia* as *C. intermedia* (L.) Merat, and γ *solida* as *C. solida* (L.) Swartz. However, G. Bunting, in a recent article (Baileya 14(1):41-44, 1966) has given convincing arguments, which are summarized below, for a different usage of the names.

The first person to treat the constituent parts of Linnaeus' *Fumaria bulbosa* as distinct species was Philip Miller in the 7th and 8th editions of the Gardener's Dictionary. In the 8th edition he associated the epithet "cava" with the form Linnaeus had treated as α *cava* and the epithet "bulbosa" with the form Linnaeus had called γ *solida*.

In 1771, in the 6th edition of the Abridgement of the Gardener's Dictionary, Miller changed his mind and attached the epithet *bulbosa* to α *cava* and the epithet *solida* to γ *solida*. It is this altered usage that has been followed by many subsequent authors.

The Code and Rules have been uniformly emphatic that a name must not be changed simply because another name

is more appropriate or familiar. It is clear that Miller's original 1768 publication must be followed.

According to the Flora Europa treatment our plant is to be called:

Corydalis solida (L.) Swartz, ssp. *solida*.

The correct citation following Bunting, for our plant is: *Corydalis bulbosa* (L. emend. P. Miller) DC. in Lam. and DC. Fl. Franc. 4:637, 1805, non Pers. 1807.

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ARNOLD ARBORETUM OF HARVARD UNIVERSITY
JAMAICA PLAIN, MASSACHUSETTS

ALYSSUM (CRUCIFERAE) INTRODUCED IN NORTH AMERICA

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The annual species of *Alyssum*, *A. alyssoides* (L.) L. [syn. *A. calycinum* L.] and *A. desertorum* Stapf [syn. *A. minimum* Willd. - non L.] are well-known Old World introductions in the North American flora. Assigned to Section *Psilonema* and native to much of Europe and Asia, *A. alyssoides* is naturalized in the Argentine and Quebec. In the United States, it is naturalized in Maine, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, West Virginia, Virginia, Michigan, Indiana, Illinois, Wisconsin, Montana, Colorado, Idaho, Wyoming, Utah, California, Oregon, and Washington. Another native of Europe and Asia, but belonging to Section *Alyssum*, is *A. desertorum*, which has a much narrower distribution in the United States. It has been collected only from sporadic populations in Bannock County, Idaho; Missoula County, Montana; Sheridan County, Wyoming; and San Juan County, Utah. Frequently confused in American herbaria with *A. alyssoides*, *A. desertorum* is easily distinguished by its larger and glabrous silicles, and early deciduous sepals. The sepals of *A. alyssoides* are persistent, and its silicles always possess an indumentum of stellate hairs.